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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHEPARD, JUSTIN E

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

05/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/928,332

Applicant(s)

JEFFERY, ROSS A.

Examiner

Justin E. Shepard

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3/22/07 have been fully considered but they are not persuasive.

Page 2, third paragraph:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., transmitting a single channel to a specific communications interface) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Page 2, section 1:

The applicant argues that the server in Adams does not control the output channel selection. The flow chart in figure 7 shows that a server is instructed to play a certain file (step 118) and then the server modulates the program onto a frequency (step 119). Adams also discloses that there are a plurality of servers modulating a plurality of files onto a plurality of channels, which are combined onto a single stream.

Page 2, section 2:

The applicant argues that as there are a number of channels being transmitted onto a single wire that a high bandwidth line would be needed, of which a twisted pair is

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not. A low bandwidth system is not claimed so the argument is moot, but even if claimed it is well known in the art to transmit large amounts of data over twisted pair lines (e.g. DSL internet service).

Page 3, section 3:

The applicant argues that Adams does not meet the switching limitation, but refers to the connection management agent performing a "switching routine." The applicant also argues that the CMA disclosed in Adams is not a processor. The examiner is interpreting a unit that performs a switching routine as being the equivalent of a processor as a broad definition of a processor would be a device takes inputs and outputs either data or control signals. As the CMA meets the broad definition, it would meet the limitation. If the applicant is referring to the processor as processing the video data, this is not clear in the claim. The examiner is interpreting the signals for switching to be the control signals from the user. If this is not the correct interpretation of the claim, then the applicant is invited to amend the claims to better clarify their meaning.

Page 3, section 4:

These arguments have been dealt with in the above responses.

Page 3, section 5:

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both systems are designed to modulate signals onto frequencies for the use of viewing them on alternative channels, and therefore they are analogous art. Specifically the device disclosed by Adams is a video distribution provided at the headend to modulate programs onto frequencies to be transmitted and tuned to by the users. Hamlin discloses a device in which the ideas of Adams are scaled down to be used in a home network. Looking specifically at figure 1 of Hamlin, one of ordinary skill in the art would be able to look at the receiving units (46) as houses in a neighborhood instead of receivers in a particular household. While Adams discloses a VOD like system where many movies are provided from a plurality of servers to be modulated onto specific frequencies, Hamlin teaches a system in which a plurality of services on a plurality of networks are modulated onto specific frequencies. Hamlin is being used to teach the concept of providing other signals besides VOD movies on the network disclosed by Adams. The demodulator is therefore included in the combination, as the other signals taught by Hamlin would require demodulation as shown in figure 2.

What follows is the previous office action, nothing has been changed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 22, 25-30, and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Hamlin.

Referring to claim 21, Adams discloses a system for redistributing a plurality of audio/video input signals to a plurality of communications interfaces over conductors, comprising:

a server (column 8, lines 24-25), the server controlling an output channel selection of the input signals responsive (column 8, lines 7-12; figure 4; figure 7, part 112) to one or more control signals input into the communications interface (figure 7, part 119), and at least one processor for processing the signals for switching (column 9, lines 59-62), and

at least one switching device for routing the channel selection in the format of an internet protocol (column 8, lines 7-12), the switching device being controlled by the server responsive to one or more control signals input into the communications interface (column 9, lines 66-67; column 10, lines 1-8) wherein the communications interface receives the channel selection for transmission to a receiving unit connected to the communications interface (column 10, lines 28-32).

Adams does not disclose a system with at least one demodulator for demodulating the input signals.

Hamlin discloses a system with at least one demodulator for demodulating the input signals (figure 2).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the demodulator taught by Hamlin to the system disclosed by Adams. The motivation would have been to allow multiple inputs to be distributed over a single bus (column 3, lines 25-28).

Claim 29 is rejected on the same grounds as claim 21.

Referring to claim 22, Adams does not disclose a system of claim 21 in which the input signals are in different signal formats.

Hamlin discloses a system of claim 21 in which the input signals are in different signal formats (figure 2).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the demodulator taught by Hamlin to the system disclosed by Adams. The motivation would have been to allow multiple inputs to be distributed over a single bus (column 3, lines 25-28).

Claim 30 is rejected on the same grounds as claim 22.

Referring to claim 25, Adams does not disclose a system of claim 21 in which the communications interface includes an optical interface for receiving the one or more control signals from an infrared remote control device.

Hamlin discloses a system of claim 21 in which the communications interface includes an optical interface for receiving the one or more control signals from an infrared remote control device (column 6, lines 9-12).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the IR remote control taught by Hamlin to the system disclosed by Adams. The motivation would have been that IR communication is a common way of transmitting control signals.

Claim 33 is rejected on the same grounds as claim 25.

Referring to claim 26, Adams does not disclose a system of claim 21 in which the communications interface includes a data interface for receiving data from a keyboard, joystick, card reader, bar code reader, or other data-providing device.

Hamlin discloses a system of claim 21 in which the communications interface includes a data interface for receiving data from a keyboard, joystick, card reader, bar code reader, or other data providing device (column 6, lines 9-12).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the IR remote control taught by Hamlin to the system disclosed by Adams. The motivation would have been that IR communication is a common way of transmitting control signals.

Claim 34 is rejected on the same grounds as claim 26.

Referring to claim 27, Adams discloses a system of claim 21 in which the communications interface includes a network interface for transmitting data from a computer as an input signal to the demodulator (figure 5, part 76).

Claim 35 is rejected on the same grounds as claim 27.

Referring to claim 28, Adams does not disclose a system of claim 21 in which the communications interface modulates the channel selection to a selected channel of the receiving device.

Hamlin discloses a system of claim 21 in which the communications interface modulates the channel selection to a selected channel of the receiving device (column 5, lines 2-4; figure 5).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the channel modulation taught by Hamlin to the system disclosed by Adams. The motivation would have been to allow multiple inputs to be distributed over a single bus (column 3, lines 25-28).

Claim 36 is rejected on the same grounds as claim 28.

Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Hamlin as applied to the claims above, and further in view of Georger.

Referring to claim 24, Adams and Hamlin do not disclose a system or claim 21 in which the channel selection is transmitted to the communications interface over an unused twisted pair of a telephone wire.

Georger discloses a system or claim 21 in which the channel selection is transmitted to the communications interface over an unused twisted pair of a telephone wire (column 2, lines 53-55).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the twisted pair distribution taught by Georger to the system disclosed by Adams and Hamlin. The motivation would have been to allow distribution of CATV signals over twisted pair, which is more likely to be installed in older homes.

Claim 32 is rejected on the same grounds as claim 24.

Claims 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Hamlin as applied to the claims above, and further in view of Georger in view of Tuttle in view of Falconer in view of Cecchin.

Referring to claim 23, Adams and Hamlin do not disclose a system of claim 21 in which the processors match the impedance of the demodulated input signal to the output impedance, raise the baseband of the demodulated input signal, equalize the high frequency components and increase the level of chroma of the demodulated input signal, and increase the peak-to-peak voltage of the demodulated input signal.

Georger discloses a system of claim 21 in which the processors match the impedance of the demodulated input signal to the output impedance (column 3, lines 21-24).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the impedance matching taught by Georger to the system disclosed by Adams and Hamlin. The motivation would have been to enable more power to be distributed through the system.

Adams, Hamlin, and Georger do not disclose a system of claim 21 in which the processors raise the baseband of the demodulated input signal, equalize the high frequency components and increase the level of chroma of the demodulated input signal, and increase the peak-to-peak voltage of the demodulated input signal.

Tuttle discloses a system of claim 21 in which the processors raise the baseband of the demodulated input signal, and increase the peak-to-peak voltage of the demodulated input signal (column 4, lines 19-24).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the baseband increasing and peak to peak voltage increasing taught by Tuttle to the system disclosed by Adams, Hamlin, and Georger. The motivation would have been to enable better signal quality.

Adams, Hamlin, Georger, and Tuttle do not disclose a system of claim 21 in which the processors equalize the high frequency components and increase the level of chroma of the demodulated input signal.

Falconer discloses a system of claim 21 in which the processors equalize the high frequency components (column 15, lines 26-31).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the high frequency equalizing taught by Falconer to the system disclosed by Adams, Hamlin, Georger, and Tuttle. The motivation would have been to enable better signal quality.

Adams, Hamlin, Georger, Tuttle, and Falconer do not disclose a system of claim 21 in which the processors increase the level of chroma of the demodulated input signal.

Cecchin discloses a system of claim 21 in which the processors increase the level of chroma of the demodulated input signal (column 7, lines 15-20).

At the time of the invention it would have been obvious for one of ordinary skill in the art to add the chroma increasing taught by Cecchin to the system disclosed by Adams, Hamlin, Georger, Tuttle, and Falconer. The motivation would have been to enable better signal quality.

Claim 31 is rejected on the same grounds as claim 23.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin E. Shepard whose telephone number is (571) 272-5967. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JS


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PRIMARY PATENT EXAMINER